PPC 15”~22”W Series

15”/17”/18”W/22”W Plastic Touch Panel PC

Quick Reference Guide

3rd – 07 October, 2010

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Part No. E2017PPC0A2R

1. Getting Started

1.1 Safety Precautions

Warning!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

1.2 Packing List

- 1 x PPC 15”/17”/18”W/22”W Series Panel PC
- 1 x CD/DVD-ROM contains the followings:
  - Quick Reference Guide (this manual in PDF file)
  - Ethernet driver and utilities
  - VGA drivers and utilities
  - Audio drivers and utilities
  - WiFi drivers and utilities
  - Touch controller drivers and utilities
- 1 x Power Adapter
- 1 x Stand for Panel PC (with 6 screws & 5 rubber-foot)
- 1 x MSR set with bracket (for optional MSR)

If any of the above items is damaged or missing, contact your retailer.

1.3 System Specifications

Panel			
	PPC-1501	**PPC-1701**	**PPC-22W01**
LCD size	15", 4:3	17", 4:3	22", 16:10
Display type	XGA TFT	SXGA TFT	WSXGA TFT
Resolution	1024 x 768	1280 x 1024	1680 x 1050
Color	16.7M	16.7M	16.7M
Pixel pitch	0.297mm(H) x 0.297mm(V)	0.264mm(H) x 0.264mm(V)	0.282mm(H) x 0.282mm(V)
Luminance	300 cd/m²	380 cd/m²	300 cd/m²
Contrast ratio	700	1000	700
Viewing angle	70(U), 70(D), 75(L), 75(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)
Response time	8 ms	5 ms	5 ms
Backlight	2 x CCFL	4 x CCFL	4 x CCFL
Touch Type	5 Wires resistive	5 Wires resistive	5 Wires resistive
Touch Light Transmission	80%	80%	80%
Touch Interface	USB	USB	USB

System	
Board	EBM-CX700
CPU	Onboard VIA Eden V4 ULV 1G (3.5W)
System Chipset	VIA CX700M
I/O Chip	VIA VT1211
Memory	One 200-pin DDR2 SODIMM socket, supports up to 1GB DDR2 400/533 SDRAM
SSD	One CF socket by IDE secondary slave channel supports Type I / II Compact Flash Card
HDD Drive Bay	One 2.5" SATA HDD or optional 44-pin enhanced IDE HDD
WiFi	Optional USB WiFi 802.11b/g
Watchdog Timer	Reset: 1 sec.~255 min. and 1 sec. or 1 min./step
H/W Status Monitor	Monitoring system temperature and voltage. Auto throttling control when CPU overheats
Expansion Slot	1 x Mini PCI

Rear Panel I/O			
Serial Port	1 x RS-232		
Ethernet	2 x RJ-45		
VGA	1 x DB-15		
Audio port	1 x Line out		
USB	2 x USB 2.0		
Speaker	2W x 2		
Mechanical & Evironmental			
System Fan	Passive Heat Sink		
Color	Front & Rear panel Black (Plastics)		
Mounting	Wall/Stand/VESA 100 mm X 100 mm		
Power Input	100~250 Vdc/ 47~63 Hz		
Power Output	+12 Vdc / 5 A (60W)		
Operating Temperature	0 to 40°C (32 to 140°F)		
Storage Temperature	-10°C to 50°C		
Relative Humidity	0%~90% relative humidity, non-condensing		
Dimensions	340 x 285 x 53 mm	372 x 324 x 53 mm	510 x 352 x 55 mm
Weight	2.79 Kgs	3.79 Kgs	4.79 Kgs

Panel		
	PPC-1503	PPC-1703
LCD size	15", 4:3	17", 4:3
Display type	XGA TFT	SXGA TFT
Resolution	1024 x 768	1280 x 1024
Color	16.7M	16.7M
Pixel pitch	0.297mm(H) x 0.297mm(V)	0.264mm(H) x 0.264mm(V)
Luminance	300 cd/m²	380 cd/m²
Contrast ratio	700	1000
Viewing angle	70(U), 70(D), 75(L), 75(R)	80(U), 80(D), 85(L), 85(R)
Response time	8 ms	5 ms
Backlight	2 x CCFL	4 x CCFL
Touch Type	5 Wires resistive	5 Wires resistive
Touch Light Transmission	80%	80%
Touch Interface	USB	USB
System		
Board	EBM-945GSE	
CPU	Onboard Intel N270 Atom processor 1.6GHz, (2.5W)	
System Chipset	Intel 945GSE + ICH7-M	
I/O Chip	ITE IT8712F/KX	
Memory	One 200-pin DDR2 SODIMM socket, supports up to 1 GB DDR2 400/533 SDRAM	
SSD	One CF socket by IDE secondary slave channel supports Type I / II Compact Flash Card	
HDD Drive Bay	One 2.5" SATA HDD or optional 44-pin enhanced IDE HDD	
WiFi	Optional USB WiFi 802.11b/g	
Watchdog Timer	Reset: 1~65535 sec./min. and 1 min./step	
H/W Status Monitor	Monitoring system temperature and voltage. Auto throttling control when CPU overheats	
Expansion Slot	One Mini PCI slot	

Rear Panel I/O		
Serial Port	1 x RS-232	
Ethernet	1 x RJ-45	
VGA	1 x DB-15	
Audio port	1 x Line out	
USB	2 x USB 2.0	
Speaker	2W x 2	
Mechanical & Environmental		
System Fan	Passive Heat Sink	
Color	Front & Rear panel Black (Plastics)	
Mounting	Wall/Stand/VESA 100 mm X 100 mm	
Power Input	100~250 Vdc/ 47~63 Hz	
Power Output	+12 Vdc / 5 A (60W)	
Operating Temperature	0 to 40°C (32 to 140°F)	
Storage Temperature	-10°C to 50°C	
Relative Humidity	0%~90% relative humidity, non-condensing	
Dimensions	340 x 285 x 53 mm	372 x 324 x 53 mm
Weight	2.79 Kgs	3.79 Kgs

Panel		
	PPC-18W03	PPC-22W03
LCD size	18.5", 16 : 9	22", 16:10
Display type	WSGA TFT	WSXGA TFT
Resolution	1366 x 768	1680 x 1050
Color	16.7M	16.7M
Pixel pitch	0.300mm(H) x 0.300mm(V)	0.282mm(H) x 0.282mm(V)
Luminance	300 cd/m²	300 cd/m²
Contrast ratio	300	700
Viewing angle	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)
Response time	5 ms	5 ms
Backlight	2 x CCFL	4 x CCFL
Touch Type	5 Wires resistive	5 Wires resistive
Touch Light Transmission	80%	80%
Touch Interface	USB	USB
System		
Board	EBM-945GSE	
CPU	Onboard Intel N270 Atom processor 1.6GHz, (2.5W)	
System Chipset	Intel 945GSE + ICH7-M	
I/O Chip	ITE IT8712F/KX	
Memory	One 200-pin DDR2 SODIMM socket, supports up to 1 GB DDR2 400/533 SDRAM	
SSD	One CF socket by IDE secondary slave channel supports Type I / II Compact Flash Card	
HDD Drive Bay	One 2.5" SATA HDD or optional 44-pin enhanced IDE HDD	
WiFi	Optional USB WiFi 802.11b/g	
Watchdog Timer	Reset: 1~65535 sec./min. and 1 min./step	
H/W Status Monitor	Monitoring system temperature and voltage. Auto throttling control when CPU overheats	
Expansion Slot	One Mini PCI slot	

Rear Panel I/O		
Serial Port	1 x RS-232	
Ethernet	1 x RJ-45	
VGA	1 x DB-15	
Audio port	1 x Line out	
USB	2 x USB 2.0	
Speaker	2W x 2	
Mechanical & Environmental		
System Fan	Passive Heat Sink	
Color	Front & Rear panel Black (Plastics)	
Mounting	Wall/Stand/VESA 100 mm X 100 mm	
Power Input	100~250 Vdc/ 47~63 Hz	
Power Output	+12 Vdc / 5 A (60W)	
Operating Temperature	0 to 40°C (32 to 140°F)	
Storage Temperature	-10°C to 50°C	
Relative Humidity	0%~90% relative humidity, non-condensing	
Dimensions	443 x 290 x 59.8 mm	510 x 352 x 55 mm
Weight	3.90 Kgs	4.79 Kgs

Panel		
	PPC-1505	PPC-1705
LCD size	15", 4:3	17", 4:3
Display type	XGA TFT	SXGA TFT
Resolution	1024 x 768	1280 x 1024
Color	16.7M	16.7M
Pixel pitch	0.297mm(H) x 0.297mm(V)	0.264mm(H) x 0.264mm(V)
Luminance	300 cd/m²	380 cd/m²
Contrast ratio	700	1000
Viewing angle	70(U), 70(D), 75(L), 75(R)	80(U), 80(D), 85(L), 85(R)
Response time	8 ms	5 ms
Backlight	2 x CCFL	4 x CCFL
Touch Type	5 Wires resistive	5 Wires resistive
Touch Light Transmission	80%	80%
Touch Interface	USB	USB
System		
Board	EBM-PNV	
CPU	Onboard Intel® Atom™ D525 Dual-Core 1.8 GHz CPU	
System Chipset	Intel ICH8-M	
I/O Chip	Winbond W83627DHG	
Memory	Onboard 1 GB, one SODIMM support up to 3 GB SDRAM	
SSD	One CF socket by IDE secondary slave channel supports Type I / II Compact Flash Card	
HDD Drive Bay	One 2.5" SATA HDD	
WiFi	Optional USB or Mini PCIe WiFi module	
Watchdog Timer	Reset: 1 ~ 255min. and 1sec. or 1min./step	
H/W Status Monitor	Monitoring system temperature and voltage. Auto throttling control when CPU overheats	
Expansion Slot	One Mini PCIe slot	

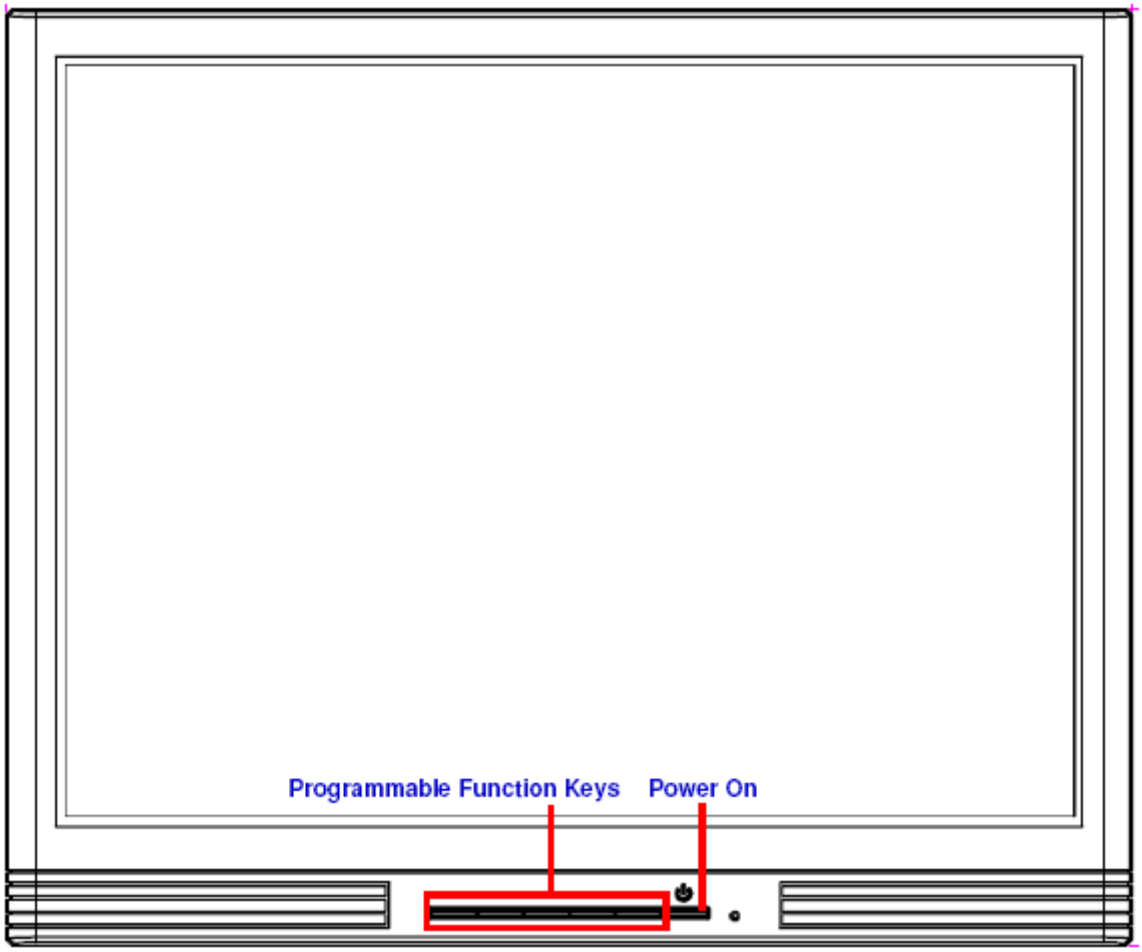
Rear Panel I/O		
Serial Port	1 x RS-232	
Ethernet	1 x RJ-45	
VGA	1 x DB-15	
Audio port	1 x Line out	
USB	2 x USB 2.0	
KB/MS	1 x PS/2 KB & MS	
Speaker	2W x 2	
Mechanical & Environmental		
System Fan	Passive Heat Sink	
Color	Front & Rear panel Black (Plastics)	
Mounting	Wall/Stand/VESA 100 mm X 100 mm	
Power Input	100~250 Vdc/ 47~63 Hz	
Power Output	+12 Vdc / 5 A (60W)	
Operating Temperature	0 to 40°C (32 to 140°F)	
Storage Temperature	-10°C to 50°C	
Relative Humidity	0%~90% relative humidity, non-condensing	
Dimensions	340 x 285 x 53 mm	372 x 324 x 53 mm
Weight	2.79 Kgs	3.79 Kgs

Panel		
	PPC-18W05	PPC-22W05
LCD size	18.5", 16 : 9	22", 16:10
Display type	WSGA TFT	WSXGA TFT
Resolution	1366 x 768	1680 x 1050
Color	16.7M	16.7M
Pixel pitch	0.300mm(H) x 0.300mm(V)	0.282mm(H) x 0.282mm(V)
Luminance	300 cd/m²	300 cd/m²
Contrast ratio	300	700
Viewing angle	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)
Response time	5 ms	5 ms
Backlight	2 x CCFL	4 x CCFL
Touch Type	5 Wires resistive	5 Wires resistive
Touch Light Transmission	80%	80%
Touch Interface	USB	USB
System		
Board	EBM-PNV	
CPU	Onboard Intel® Atom™ D525 Dual-Core 1.8 GHz CPU	
System Chipset	Intel ICH8-M	
I/O Chip	Winbond W83627DHG	
Memory	Onboard 1 GB, one SODIMM support up to 3 GB SDRAM	
SSD	One CF socket by IDE secondary slave channel supports Type I / II Compact Flash Card	
HDD Drive Bay	One 2.5" SATA HDD	
WiFi	Optional USB or Mini PCIe WiFi module	
Watchdog Timer	Reset: 1 ~ 255min. and 1sec. or 1min./step	
H/W Status Monitor	Monitoring system temperature and voltage. Auto throttling control when CPU overheats	
Expansion Slot	One Mini PCIe slot	

Rear Panel I/O		
Serial Port	1 x RS-232	
Ethernet	1 x RJ-45	
VGA	1 x DB-15	
Audio port	1 x Line out	
USB	2 x USB 2.0	
KB/MS	1 x PS/2 KB & MS	
Speaker	2W x 2	
Mechanical & Environmental		
System Fan	Passive Heat Sink	
Color	Front & Rear panel Black (Plastics)	
Mounting	Wall/Stand/VESA 100 mm X 100 mm	
Power Input	100~250 Vdc/ 47~63 Hz	
Power Output	+12 Vdc / 5 A (60W)	
Operating Temperature	0 to 40°C (32 to 140°F)	
Storage Temperature	-10°C to 50°C	
Relative Humidity	0%~90% relative humidity, non-condensing	
Dimensions	443 x 290 x 59.8 mm	510 x 352 x 55 mm
Weight	3.90 Kgs	4.79 Kgs

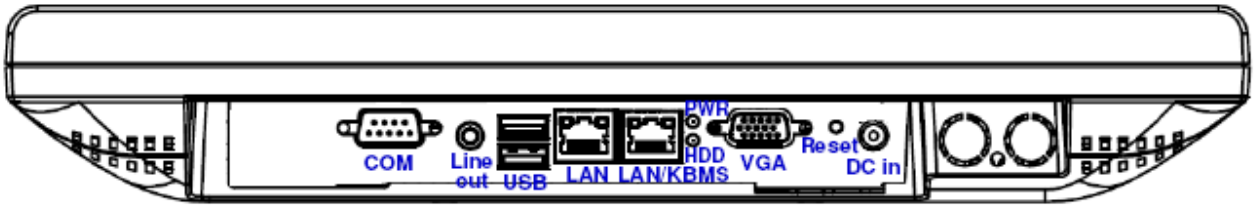
1.4 System Overview

1.4.1 Front View



Note: The programmable function keys are available to be programmed by the user, and they are unable to work unless programmed.

1.4.2 Rear View

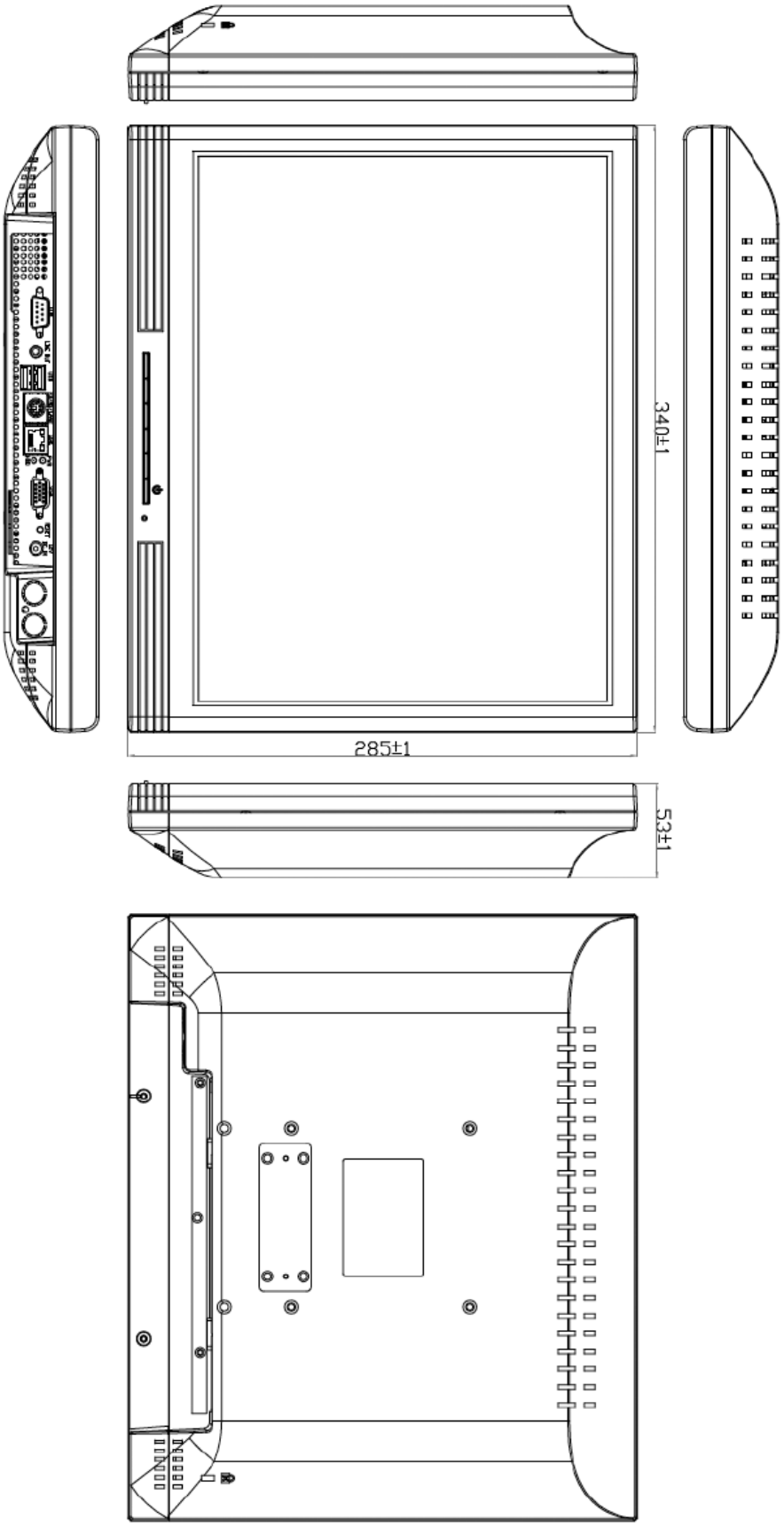


Connectors

Label	Function	Note
COM	Serial port	DB-9 male connector
DC in	DC-in power connector	
HDD	HDD LED	
LAN	10/100/1000Base-Tx Ethernet connector	RJ-45
LAN/KBMS	10/100/1000Base-Tx Ethernet connector or PS/2 keyboard & mouse	RJ-45 or 6-pin Mini DIN
LINE OUT	Line-out audio jack	
PWR	Power LED	
Reset	Rest button	
USB	USB 2.0 connector	
VGA	CRT connector	DB-15 female connector

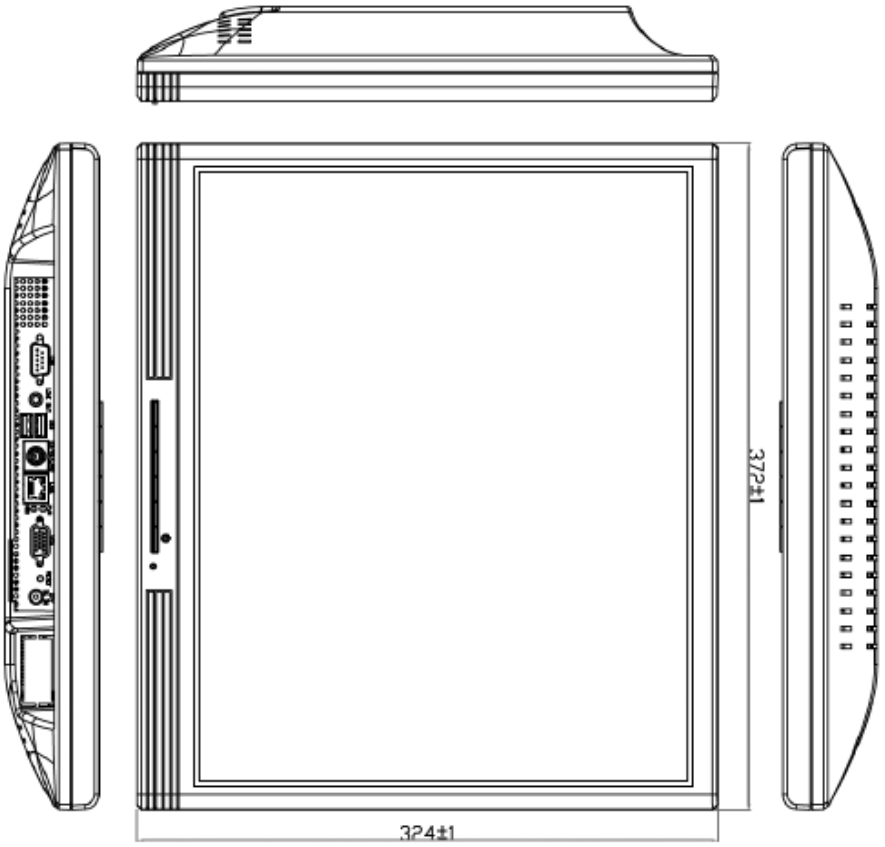
1.5 System Dimensions

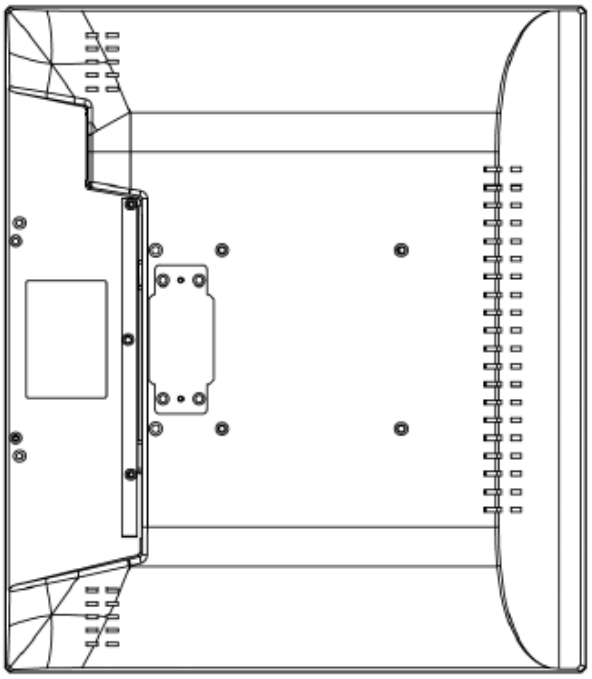
1.5.1 PPC 15” Series



(Unit: mm)

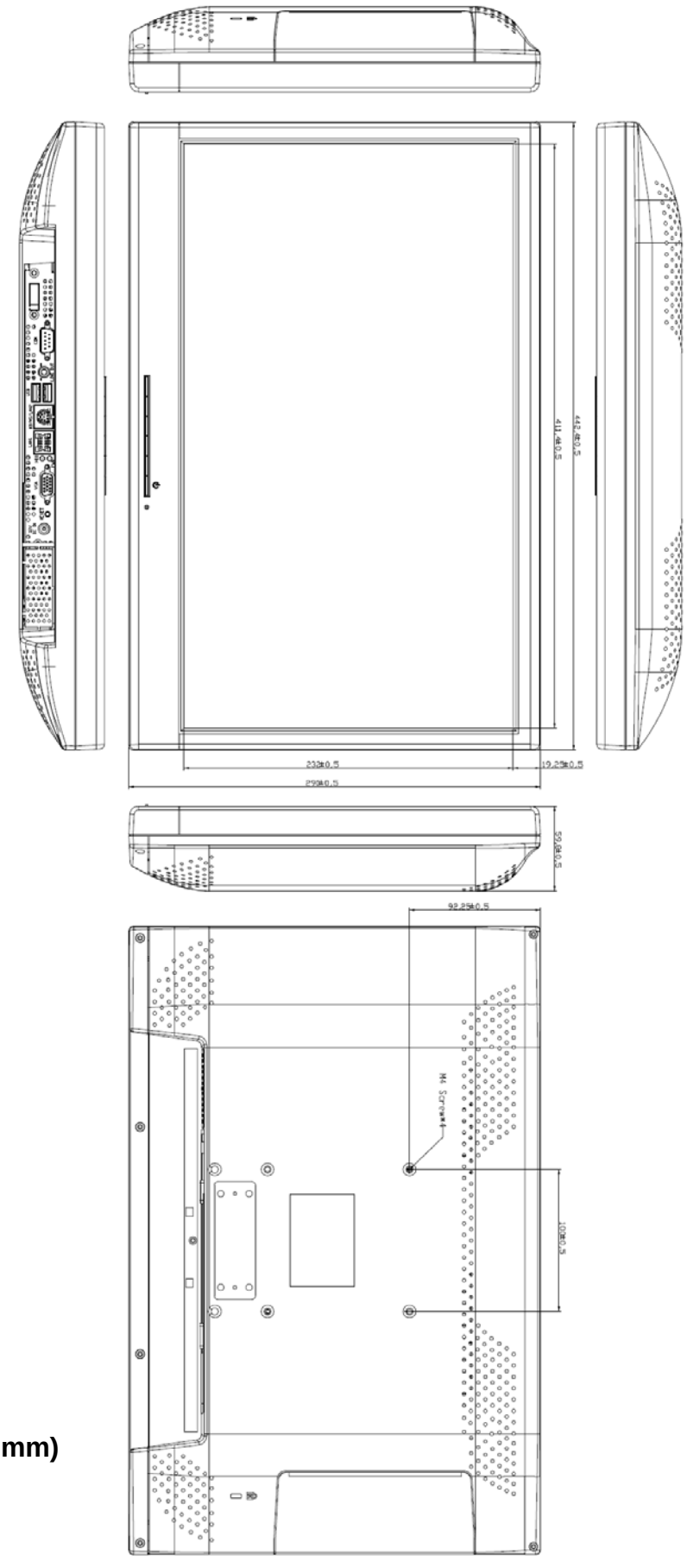
1.5.2 PPC 17” Series





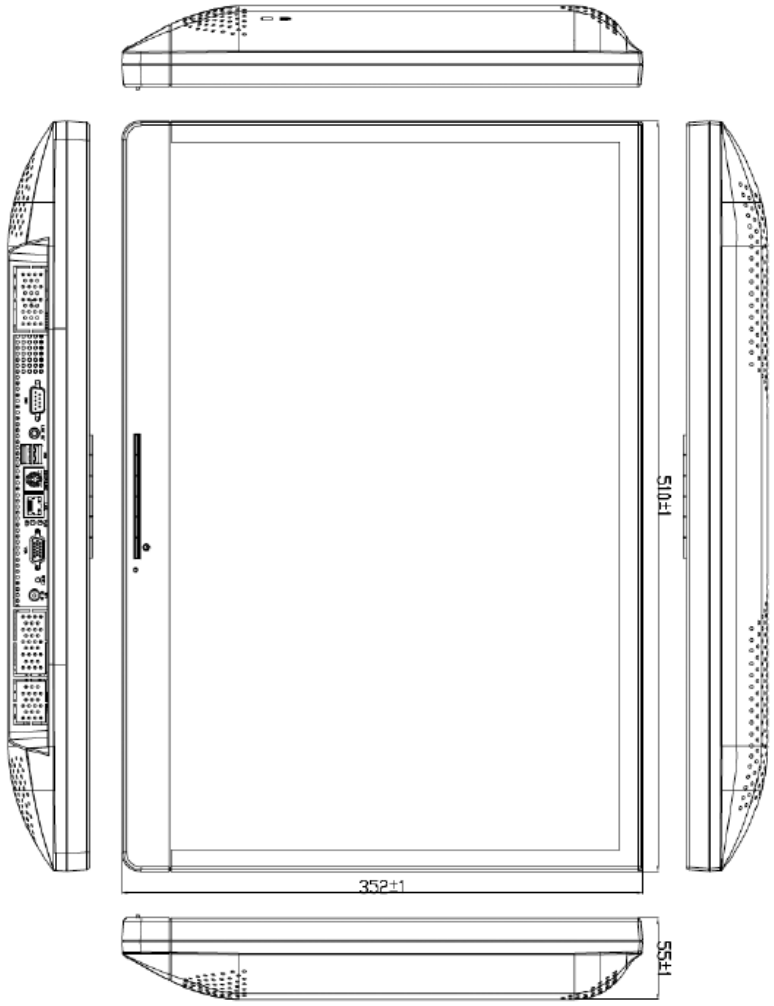
(Unit: mm)

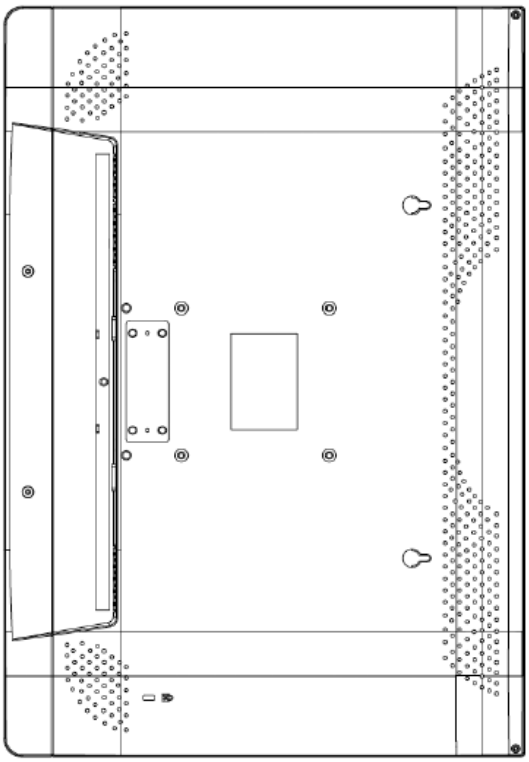
1.5.3 PPC 18” Widescreen Series



(Unit: mm)

1.5.4 PPC 22” Widescreen Series





(Unit: mm)

2. Hardware Configuration

2.1 Jumper and Connector Setting, Driver and BIOS Installing

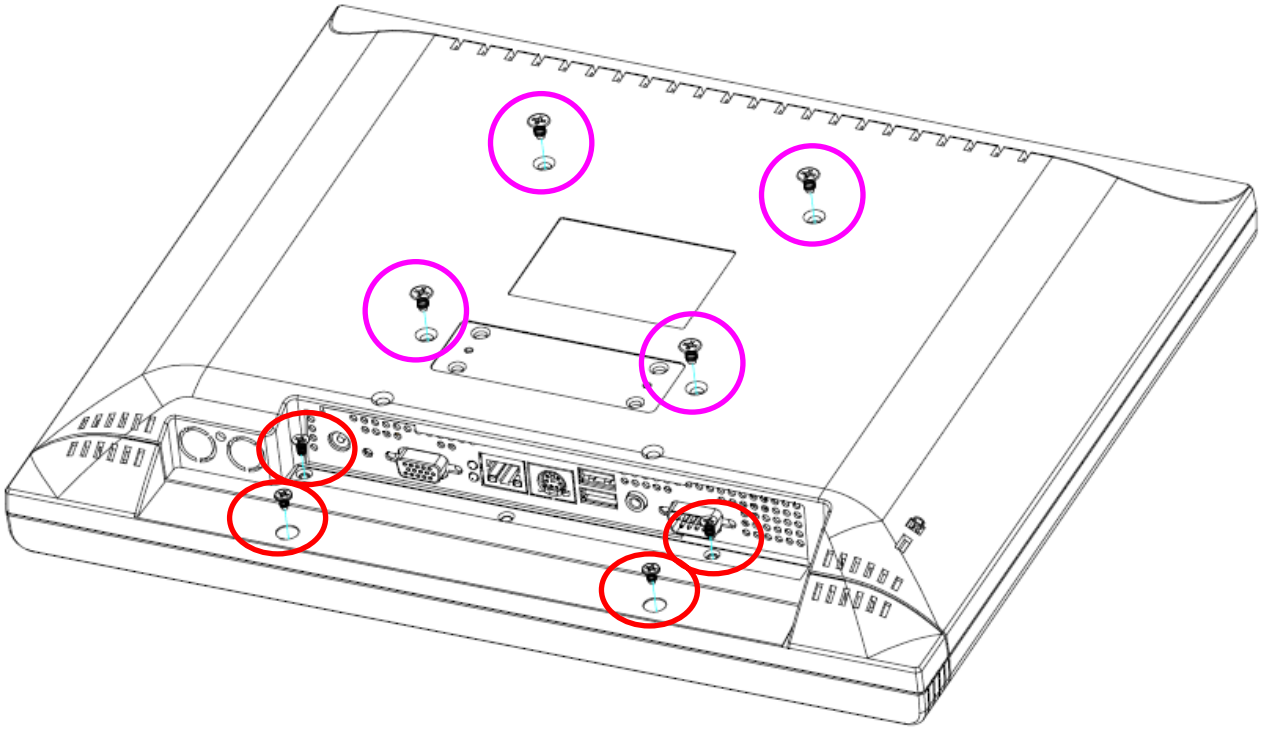
- Please refer to EBM-CX700, EBM-945GSE, EBM-PNV Quick Installation Guide or User's Manual.

Note: If you need more information, please visit our website:

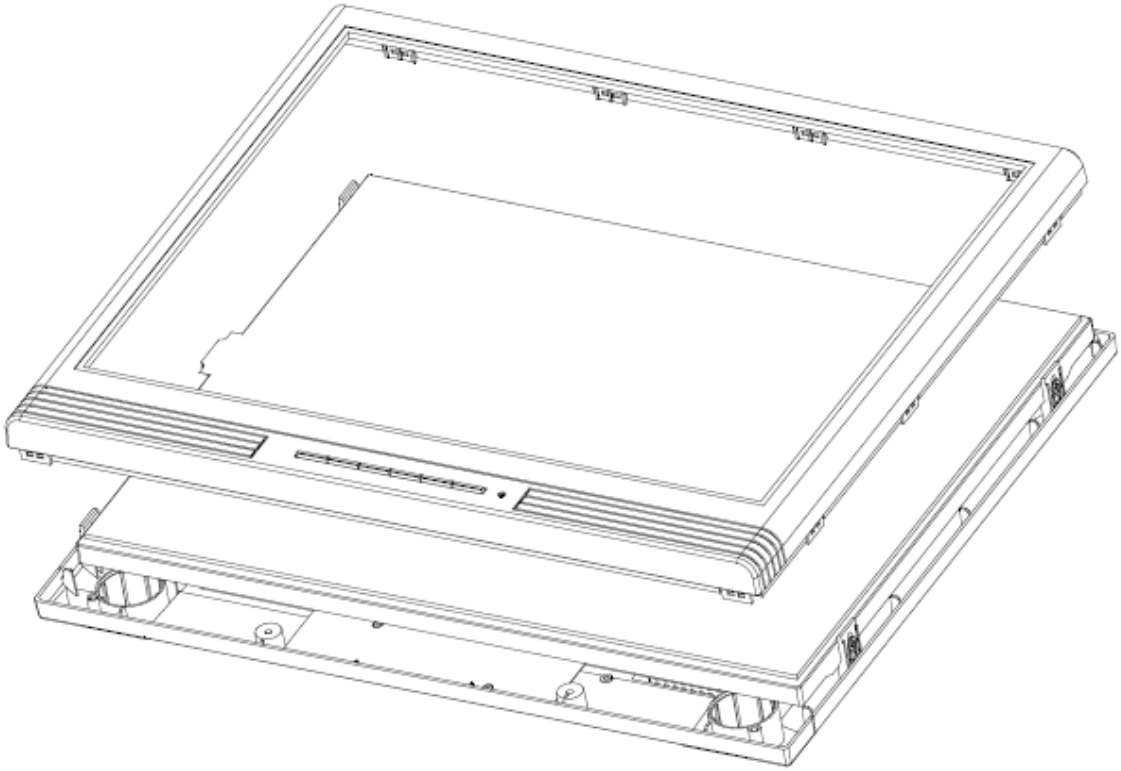
http://www.avalue.com.tw

2.2 Installing Hard Disk & Memory

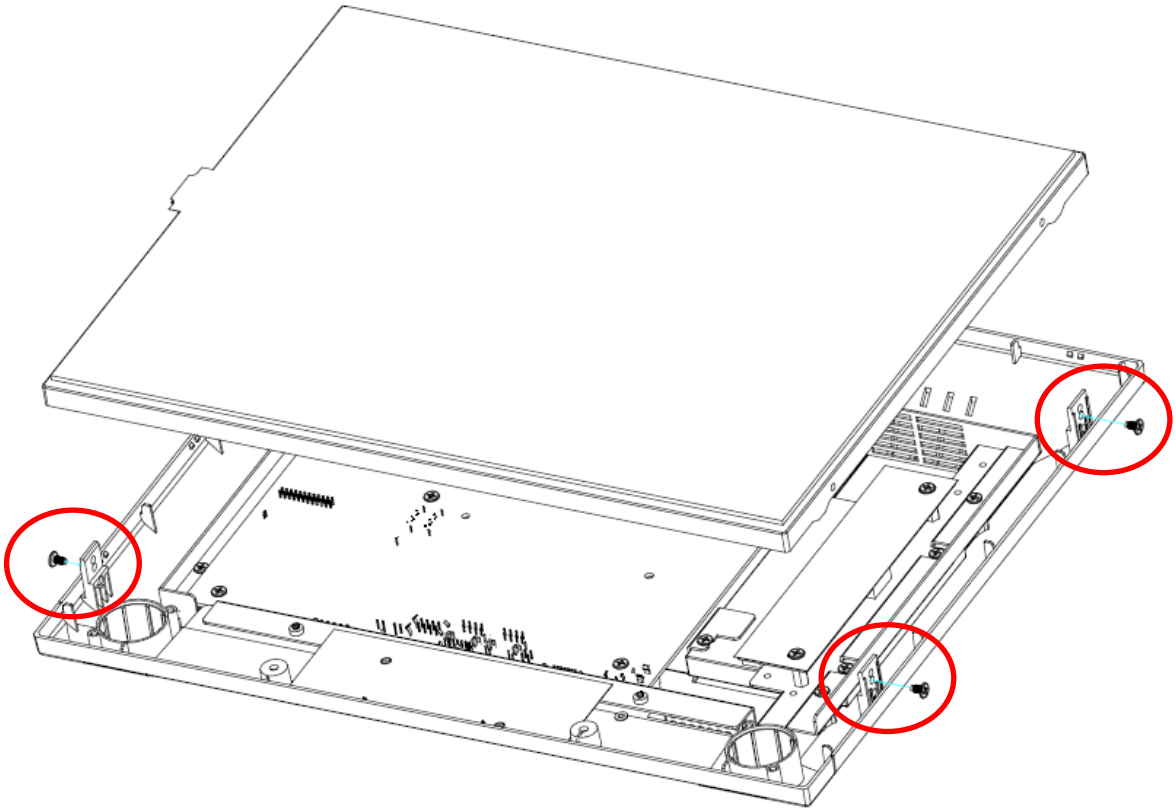
2.2.1 Install 2.5” HDD



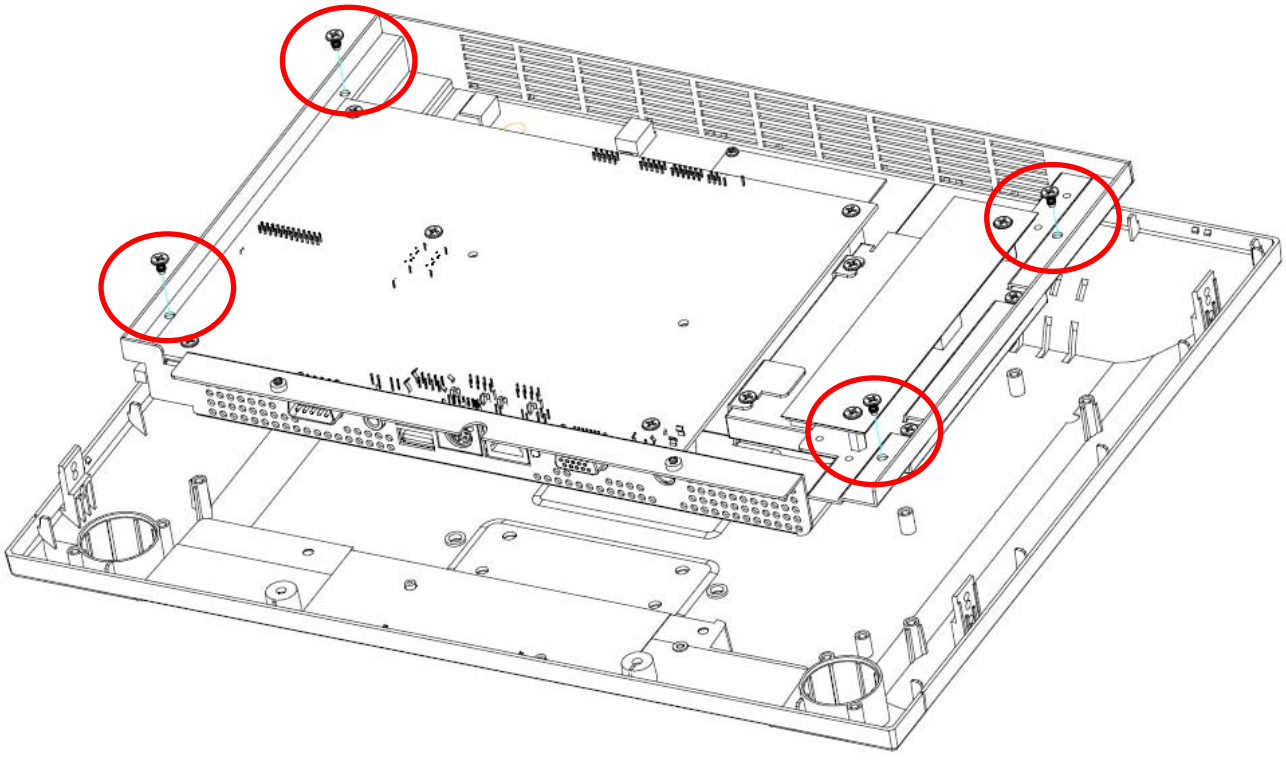
Step 1. Unfasten 4 screws from the rear middle side and 4 screws from the rear bottom side of PPC-1501 as above.



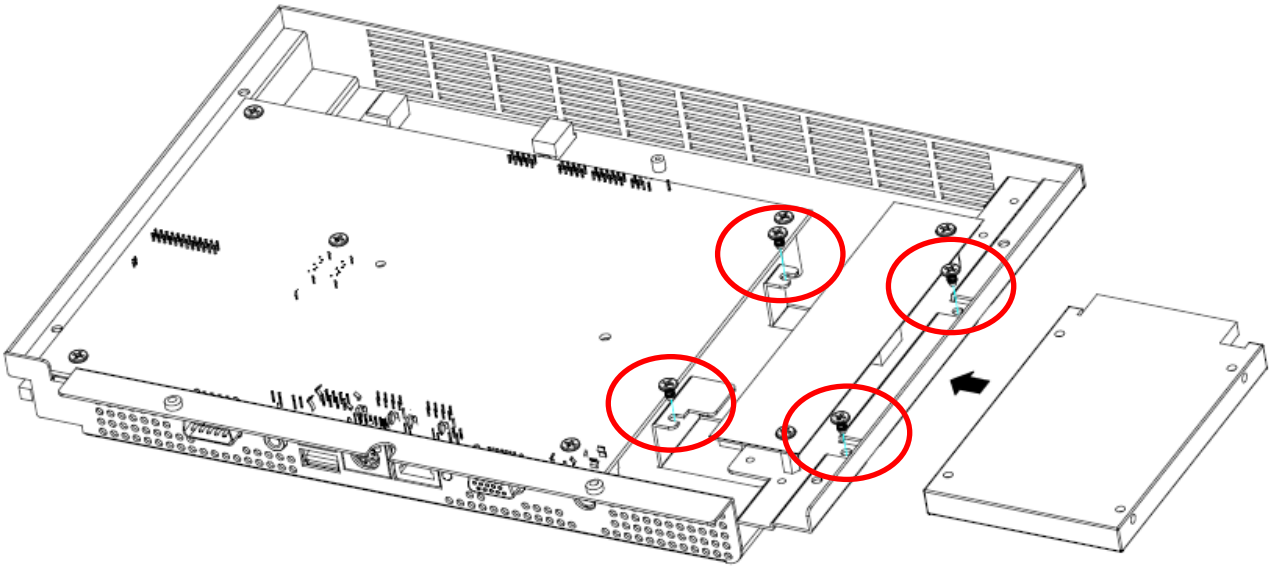
Step 2. Remove the front panel chassis.



Step 3. Unlock 4 screws from the panel through the bottom chassis as above.



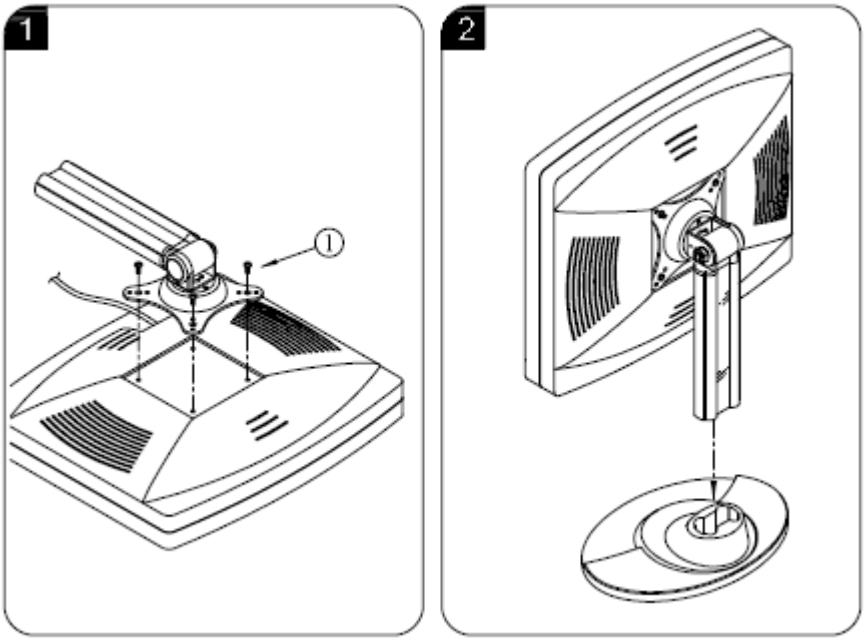
Step 4. Unfasten 4 screws from the metal bracket through the bottom chassis as indicated.



Step 5. Place the 2.5” HDD to the right position and fasten 4 screws to fix.

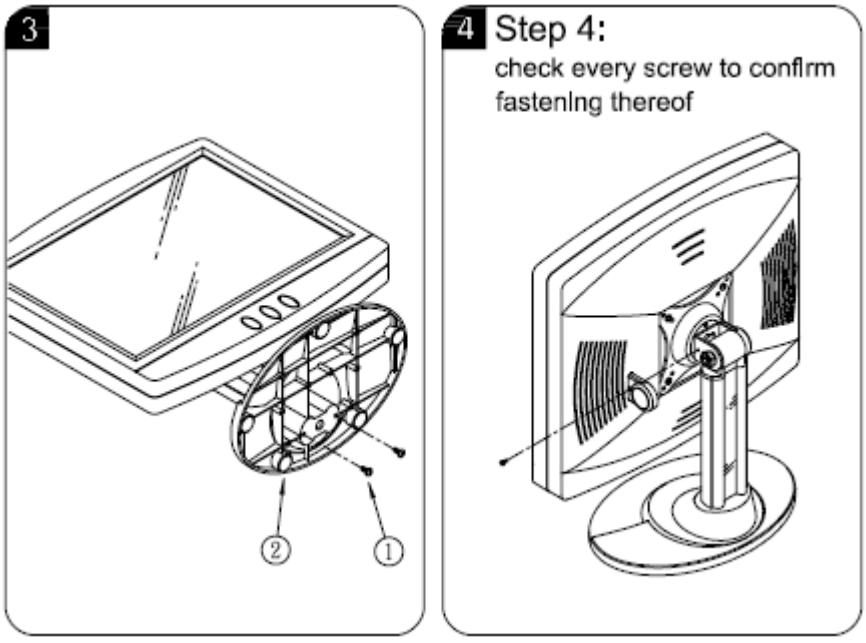
Step 6. Assemble the whole system as step 5, 4, 3, 2, 1.

2.3 Installing Panel PC Stand



Step 1. Fasten 4 screws from the stand as indicated as above.

Step 2. Place the stand into the plastic plate.



Step 3. Stick the rubber-foot onto the back of the plastic plate and lock with 2 screws.

2.4 Installing Optional MSR Module

Step 1. Take out the MSR with bracket module from the accessory box.

Step 2. Place the MSR module onto the back of PPC-1501 and make sure the holes meet the VESA mountings.

Step 3. Put on the stand right above the MSR module and have 4 screws locked.

Step 4. Make the cable pass the hook of the bracket, and plug the USB cable to the USB connector.